

# Germany's churches and cathedrals

Everyone knows, of course, that in Cologne, Worms, Freiburg, Aachen, Ulm and elsewhere ancient Gothic and Romanesque cathedrals tower up like castles into the sky. Impressive structures down to the very treasures in their vaults. For even here, in this land of industry, tourism, inter-city trains, airlines and motorways, churches, cathedrals and chapels have more than a spiritual function. They are reminders, thought-provoking. Cherished as

artistic masterpieces. Take, for instance, the delightful Romanesque church in Dietkirchen on the Lahn. Or the enchanting Wieskirche, surrounded by the woods and meadows of the Alpine foothills in Upper Bavaria. Clear, serene, rococo splendour. Just two examples from many thousands. "Churches," as James Joyce wrote in 1915 on a Rhine journey, "like miracles from heaven."



Bamberg, Bavaria

Velbert Naviges Church in the Ruhr

...on further easements to relax tension and reduce mutual mistrust. The prospects for this minority's hopes are none too good, neither in Madrid nor anywhere else in the world. So it is all the more important to recall that in current political affairs the CSCE process is playing a part that no other organisation, round of talks or conference could. At Salt, the strategic arms limitation talks, which in any case are currently making time only the two superpowers face each other across the conference table, and they are only discussing certain weapons. In Vienna too, also without results to

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## Helsinki spirit is still a confidence-builder

...say the future of nations and states will continue to depend solely on how many divisions they have and how effective their arms are. They will have said from the start that the political process begun in Helsinki in 1975 and shortly to be resumed in Madrid was either an illusion or a failure. Advocates of Realpolitik will have little to say that is positive to say about the Conference on Security and Cooperation in Europe (CSCE) and its review conferences in Belgrade and now Madrid. At best, they may say, the West has been able, at the CSCE, to pillory the East for its transgressions in the wide-ranging context of human rights. Only a minority of politicians and diplomats still see any hope of the CSCE helping East-West talks alive and agree-

date, the two sides are merely talking about troop cuts in Central Europe. As for the Geneva disarmament conference, it is likewise convened to discuss arms alone and has accomplished very little over the years. The CSCE encompasses a much wider range of issues, both security matters and economic and cultural problems. Above all it has sought, despite ideological differences, political clashes and military tension, to reach agreements with a direct bearing on making life easier for ordinary people. More rights and freedoms for the individual in his own country and contacts across frontiers and reuniting of families are but a few examples of what was envisaged. Much has ground to a halt after a promising start (or never even got off the ground), yet it seems far from utopian to hope that a new start in this sector might be made in Madrid. It would, of course, presuppose that East and West were agreed on the preconditions on which or the programme with which the Madrid gathering might convene a conference on confidence-building measures and disarmament in Europe.

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Chancellor Schmidt and President Giscard at a working dinner in Blaesheim, Alsace. With them are Foreign Ministers Hans-Dietrich Genscher (rear) and Jean-François Poncelet (foreground).

## Schmidt and Giscard

President Giscard d'Estaing and Chancellor Schmidt last met to discuss world affairs five weeks ago at the Franco-German summit. Nothing has since happened that would seem to warrant another meeting so soon. They could have conferred by telephone as they otherwise regularly do. Yet there must be some good reason why the two leaders met at a hotel in Blaesheim, Alsace, for a working meal of choice Alsatian regional dishes. Forthcoming deadlines leave little doubt who was to be impressed by this demonstration of Franco-German togetherness. Herr Schmidt is shortly to meet President Reagan in New York, for instance. The signs are that the Chancellor and the French President saw fit to indicate that apparent differences in their assessment of aspects of Mr Reagan's foreign policy were a mere detail. Paris and Bonn still retained their basic outlook on world affairs and the views they shared meant that the Franco-German axis still held good in dealings with the United States. Consultations before important deadlines are a traditional feature of Franco-German cooperation and testify to the quality of ties between Paris and Bonn. The same is true of preparations for the next meeting of the European Council, as the EEC summit is known, which will have to come to terms with Britain's veto on EEC fishery policy. Showing Britain the flag was another reason for the Blaesheim meeting of the French and German leaders. Last not least, M. Giscard d'Estaing will also have had the forthcoming French Presidential elections in mind. A working dinner with the West German leader testifies to a most satisfactory aspect of the seven years' the French President has so far spent in office. (Weidendeutsche Allgemeine, 16 March 1981)



## Carstens hosts Ford

Bonn President Karl Carstens and his wife Veronika gave a dinner in honour of former US President Gerald Ford and his wife Betty, who were on a private tour of Europe. Mr Ford brought Chancellor Schmidt a private message from President Reagan.

Handwritten note in Arabic script: "هذا من الجليل"



## WORLD AFFAIRS

Genscher in Washington  
clears the air

Germany and America are not on such bad terms with each other as may at times have seemed the case prior to Bonn Foreign Minister Hans-Dietrich Genscher's visit to Washington.

But ties between them are not as unproblematic as they were made out to be during and immediately after Herr Genscher's visit either.

There is nothing new about days, not to say weeks, of talk of crisis being suddenly followed by talk of complete harmony. Positive exaggeration is intended to take the edge off the negative variety.

Recent talk of Bonn no longer being an altogether reliable member of the Western alliance was not, of course, to be taken seriously.

People who promoted it in Washington did so despite knowing better, as did those who spread the rumour in Germany.

To put paid to it both Herr Genscher and Mr Haig trundled out the gamut of transatlantic old hat, calling Germany a cornerstone of the alliance, America's foremost ally and a country to rely on.

Since such phrases are a little threadbare from overuse the US Secretary of State felt called on to make a few additions.

Herr Genscher, he said, was currently the greatest in Europe. German-American relations could hardly be better than at present, or so he claimed to feel.

## Helsinki

Continued from page 1

thus counsel recurring rounds in the arms race.

Confidence-building measures will at least gradually shed light on the intentions of the other side, making one feel more at ease, albeit not overnight.

But formidable obstacles must be scaled before this can be accomplished by means of measures such as early warning of military moves of all kinds, evacuation of armed forces from border zones, information about arms expenditure and projects and so on.

The most formidable obstacle is probably the understandable fear that Mr Brezhnev's peace offensive might serve no other purpose, like similar bids after Hungary in 1956 and Prague in 1968, than to make the West forget about the Soviet invasion of Afghanistan.

A further obstacle is Mr Reagan's determination not to negotiate until America and the West have grown stronger.

Last not least, Washington currently seems to rate actions in the Persian Gulf and even in El Salvador more important than words about Europe.

Even so, neither side will want to be judged irresponsibly to blame for a breakdown in the CSCE process.

The West ought also not to forget that the East Bloc proposal is for the conference on military detente and disarmament to start in Warsaw on 20 October 1981.

Were agreement reached on this time and place, Poland and Europe need hardly live in fear of Soviet intervention in Warsaw for the time being.

So Mr Brezhnev ought to be taken at his word. Madrid should provide a convenient opportunity of doing so.

Hans Gerlach  
(Köln: Stadt-Anzeiger, 13 March 1981)



Such rhetorical sweetmeats may be fine for a change but bread and butter are better for the stomach. German-American ties, it transpired, are to continue on a mixed diet.

It will be a mixture in which armaments, account for a larger share than arms limitation regardless whether or not Herr Genscher's review of his talks seemed to foster hopes of the Reagan administration being in the process of attaching equal importance to both.

This is true, if at all, of the twofold Nato arms modernisation and negotiation decision taken in Brussels in December 1979, yet even in this context scepticism is called for.

At Mr Haig's State Department it has grown apparent that readiness to negotiate with Moscow on a limitation of medium-range missiles in Europe has been declared less out of conviction than as a means of helping America's allies to cope with domestic resistance to the next round in the arms race.

Washington's acquiescence on this point is tacitly motivated, aimed at helping governments in Bonn and elsewhere in Western Europe to combat growing doubts felt by many people about the Nato decision.

The decision to negotiate is said to be no less important than the decision to go ahead with missile modernisation even though it is fairly clear that the Reagan administration feels the manufacture and deployment of the 572 new missiles in Europe is more or less indispensable.

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It would be unfair to suggest that Washington is merely paying lip service to negotiation but Bonn would nonetheless be well advised not now to believe the Reagan administration had been convinced that the German viewpoint was right.

Bonn's view is that arms and arms limitation endeavours by the West must be so harmonised as to ensure that security is stabilised at a lower arms level.

In Washington Herr Genscher repeatedly stressed this point, and the impression arose that Bonn's view was shared by his hosts.

Ideally this might be true, but practically US policies are aimed firmly at a military build-up, whatever evaluation may be made of it.

There is certainly no question of a lower arms level. The only prospect is that of East-West talks which, even if they were to begin this summer, would not lead to new arms arrangements for several years, and then only at a higher level.

The Reagan administration has not set out to persevere with detente policies, but Moscow's detente offensive, accompanied by the urging of its Western European allies, is obliging the United States to show readiness to negotiate sooner than intended.

Washington may say that negotiations on Eurostrategic weapons will be prepared at Nato before the end of the month. It may also say that Presidents Reagan and Brezhnev could hold a summit meeting between summer and autumn.

But that is not to say a change of course has either taken place or is in the process of doing so.

For the time being all it means is that more flexible use is being made of the conviction shared by President Reagan, Secretary of State Haig, Defence Secretary Weinberger and others that the United States must regain self-confidence both politically and militarily.

Jürgen Kanner

(Hannoversche Allgemeine, 12 March 1981)

Moscow browbeats Bonn to make  
moratorium palatable

Moscow's propaganda broadsheet leavelled at Nato's missile modernisation decision, which came as no surprise, are accompanied by pointed remarks in Hans-Dietrich Genscher's direction.

Foreign Minister Genscher has borne the brunt of criticism in the past when Soviet accusations were in fact levelled at the Bonn government as a whole.

Chancellor Schmidt, as head of government, has tended to be let off fairly lightly.

The attitude Moscow has adopted towards Herr Genscher can hardly be described as cordial bearing in mind that he is to visit the Soviet capital at the end of this month.

The Foreign Minister's visit to Moscow is, after all, a gesture of good will on Bonn's part and a token of the German government's readiness to keep talking with the Soviet Union despite the current cold front in East-West relations.

Moscow too has stressed time and again the advantages it has gained from the policy of coexistence with Western Europe; it last did so in Mr Brezhnev's address to the 26th Party congress.

In attacking Herr Genscher Moscow must, one assumes, be paving the way for the forthcoming talks with Bonn in the Soviet capital, which will deal mainly with disarmament.

Herr Genscher can expect his Soviet hosts to do their utmost to persuade him of the advantages of the medium-range missile moratorium in Europe proposed by Mr Brezhnev.

They will also try to convince him that a balance of power already exists in Western Europe, from which it follows that the stationing of fresh US missiles in West Germany is unnecessary.

Moscow would dearly like to dissuade Bonn from going ahead with the missile modernisation programme and misses no opportunity of pointing out clashes of interest between Europeans and Americans.

Interests do indeed clash at times and in a number of fields but not, let it be stressed, in the security sector.

The Soviet Union has started by training the heavy artillery of propaganda on Herr Genscher with a view to softening him up and making him ready to agree to political compromises.

The Kremlin is keen to keep up dis-

Bonn MPs on HOME AFFAIRS  
aid to Turkey

Leading representatives of democratic political parties in Turkey have unanimously agreed that the West must aid to Ankara even under military government.

If economic aid were to be stopped, a simple statement of fact at the moment could prove even more difficult.

This is one of the results of a week fact-finding mission to Turkey by a five-member Bonn Bundestag delegation consisting of Peter Corterius (Ingeborg Hoffmann (CDU), Helga Schuchardt (CDU), Helga Schuchardt (CDU), and Karsten Voigt (SPD).

They briefed Foreign Minister Genscher before he flew to Washington, in mind that this year's aid to Turkey would be an item on Herr Genscher's agenda with the US government.

In varying degrees the five MP conditions must be fulfilled before a Bundestag approval could be given to the year's aid package to Ankara.

Herr Corterius, for instance, felt the current 90-day detention provisions in emergency regulations in Turkey must be drastically reduced and that no compromise should be considered as a subject.

Herr Mertes stressed that torture of human rights violations were by means limited to the current military regime; they had always occurred in Turkey.

Frau Schuchardt said the Turkish government must issue public declarations of its 1979 Basic Law, tersely states: "All of torture. By the time torture is used it is too late."

Stricter conditions must be added to further aid, she said. The delegation demands are likely to make their way in parliamentary discussion of the programme in Bonn.

(Die Welt, 10 March 1981)

armament talks with the West are the main objective of Soviet Westpolitik.

Yet it is not prepared to be a good behaviour needed to persuade Washington that it is serious and what it says.

President Reagan noted in an interview that moderate Soviet pressure on Libya, for instance, to persuade Gaddafi to scale down his great-power behaviour towards neighbouring states would impress him more than any catalogue of vaguely-worded demands or arms control proposals.

Peter Soltau

(Mannheimer Morgen, 13 March 1981)

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Squatters and nuclear  
demonstrators march

also many who felt relief at the tough police action.

It was time, they said, that law enforcement showed that it still had some clout and that legitimate authority prevailed over illegitimate violence.

In justifying this police action, Nuremberg Prosecutor Rudolf Brunner has been quoted by a daily as saying: "There have been signs lately that we are getting used to unlawful conduct. I would like to ask the Press to help us in changing this so that the public should not think that acting illegally isn't all that bad."

The genuine demonstrator and the worried prosecutor represent two important elements in today's domestic policy scene.

The demonstrator wants his freedom to demonstrate and essentially takes the constitutional sovereignty of the people literally.

But in doing so he runs the risk of being drawn into violence by extremists and thus breaking the law.

The prosecutor, on the other hand, has been entrusted by the sovereign people with the task of enforcing the law. As a result, he has no option but to prosecute even when the breach of law is of a minor nature as in Nuremberg where demonstrators protested against scandalous housing speculation.

But the Nuremberg incident also shows that going too far in enforcing the law with the clear intention of setting an example (along the lines of we Bavarians will show those weaklings in Berlin and Bonn a thing or two) can lead to further and worse violence.

It can make essentially peaceful demonstrators join those who want to change the system by violence under the guise of social objectives.

It is such considerations, i.e. that law enforcement at any cost can be unwise, that have prevented such upright guardians of the law as Berlin's new mayor, Hans-Jochen Vogel, and Justice Senator Frank Dahrendorf from using the police to clear the illegally occupied houses and thus enforce the law.

Neither law enforcement at all cost nor feeble laissez-faire are called for in Berlin or elsewhere.

What is called for, and these are the foremost virtues of democratic leadership, are steadfastness in matters of principle and flexibility in the use of the instruments of law enforcement.

There is also a need for consideration for the mood of the people and their fears and for protest attitudes on the part of majorities or minorities.

These arrested evidently included a dozen youngsters who happened to have been at the City Youth Centre but did not take part in the demonstration.

Although only few of the demonstrators threw stones and shattered several windows, causing about DM30,000 worth of damage, the Bavarian police took unprecedented action by arresting a large number of people.

Even young fellow-travellers suddenly found themselves facing charges of creating a public disturbance.

Did the police violate the principle of proportionate response, some Nuremberg city councillors ask? Yet there were

also many who felt relief at the tough police action.

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Several thousand people demonstrating in front of Nuremberg prison in protest at the police detention of 141 young people after a demonstration in support of squatters the previous day. (Photo: dpa)

New weapons  
for police?

Policemen are increasingly seeing themselves as butts when dealing with violent demonstrations, and the number of badly hurt policemen in Brokdorf and elsewhere bears them out.

As a result, Bavaria intends to equip its police force with new weapons to ensure a better defence against violent rioters. There is talk of chemical additives to the water used in water cannons and of rubber bullets.

The question now is: Is this really necessary?

The tear-gas additive for water cannon has been in existence for some time. It is used only when tactical considerations and weather conditions permit because the wind must be blowing away from the police.

In Brokdorf, for instance, the police used plain water, and wisely so because the wind could well have turned the tear-gas into a boomerang and put them too out of action.

Still, more effective additives for water cannons, as used abroad, should not be a bone of contention as long as they are not harmful to health.

This does not apply to rubber bullets. They are effective and harmless only at the ideal range of 25 metres. At closer range they not only indiscriminately hit rioters and bystanders but can also cause severe injury; and this would be intolerable.

When the range is longer than 25 metres they are not only ineffectual (as experience in Switzerland shows) but also lead to further escalation of violence to the point where demonstrators shoot back, and not with rubber bullets.

The new wave of violence in Germany cannot be stemmed by tougher police action but would, in fact, escalate.

The police must therefore stick to the principle of proportionate response. But this does not mean that they should stand by idly and expose themselves to violence. Police action must be resolute and at the same restrained.

This is as far as the function of law enforcement goes. It is up to the politicians to deal with the causes of violence, be it with or without new weapons.

Moreover, the policeman who defends the law also has a right to a political solution. To give him new arms attacks of an attempt to evade looking for a political solution.

Jürgen Diebäckel  
(Rheinische Post, 13 March 1981)

As to the causes of the latest wave of protests, the Chancellor held that many young people felt material affluence was no longer secured.

Criticism was frequently caused by "genuine want and symbolic protest" against affluence-orientation and the fallibility of democracy also played a role.

But violence must not be tolerated, the Chancellor said, adding that some aggressive youngsters were dismayed by the lack of civil courage on the part of adults who didn't stand up and say no.

Attempts by the conservatives to bring about the integration of the young through force could only lead to disintegration, he said.

(Köln: Stadt-Anzeiger, 13 March 1981)

Not criminals,  
says Schmidt

Young demonstrators must not be treated as criminals, Chancellor Helmut Schmidt said in a recent speech.

He went on to say that the stability of society could not be safeguarded if large segments of youth were pushed to its periphery.

Attempts by the conservatives to bring about the integration of the young through force could only lead to disintegration, he said.



Are East and West in the throes of an arms race to end all arms races? This was not the kind of question dealt with at the brains trust session convened by Bonn Defence Minister Hans Apel.

Steering well clear of such apocalyptic visions the brains trust had more in common with a gathering of accountants as they sought to reconcile funds requested and allocations available.

In the wake of reports headed Tornado Debate, Bundeswehr Bankrupt and Apel In Trouble the conclusions reached were surprisingly reassuring.

The public reaction ranged from understanding to unconcern. There may have been no shock horror headlines, but all things bright and beautiful again at the Defence Ministry?

The answer might, arguably, be yes. Herr Apel originally looked like running DM2.3bn short of funds to equip the Bundeswehr in 1982, 1983 and 1984, but cuts and postponements have reduced the expected shortfall to DM1bn.

This is a sum Finance Minister Hans Matthöfer is expected to raise. Herr Matthöfer will also have to raise a further DM1.2bn towards the cost of host nation support.

This concept entails construction and staff expenditure in connection with US reinforcements in the event of an emergency. It is an issue on which the Bonn government has finally realigned priorities after lengthy hesitation.

Herr Apel is also expecting the Finance Minister to meet the extra cost of current weapons systems caused by inflation.

The cuts in defence spending to which he has agreed in return are by no means disastrous, although the Luftwaffe as the main victim is by no means happy.

But the air force was largely to blame for the shortfall, caused mainly by the Tornado multi-role combat aircraft. Accounting for 80 per cent of equipment costs, it has understandably been hit hardest.

The bulk of the arms programme has not been axed, however. It includes 1,800 Leopard Mk II tanks, 322 Tornados and eight new frigates for the Bundesmarine (although construction of the last two warships is to be delayed).

Even so, the reassuring note sounded by the brains trust is deceptive. The long-term outlook is much more alarming. There are too many unknown quantities in the entire equation.

The annual inflation-induced increase in arms expenditure is expected to be seven per cent. This increase has yet to be included in Bonn budget estimates.

Estimates of the inflation-induced extra costs that will arise over the next five years vary substantially, being put by the CDU's Manfred Wörner, the Opposition defence spokesman, at DM10bn.

This may be a deliberate exaggeration, but no-one can really tell. Even sanguine but level-headed pundits expect the inflationary extra to amount to at least DM500m next year alone.

Medium-term financial planning does not provide for any real growth in defence expenditure between now and 1984. Estimates are based on the assumption of zero growth in real terms.

Defence spending as a proportion of the budget as a whole, of which it accounted for 27.1 per cent as recently as in 1970, is scheduled to decline from its current 18 to a mere 16 per cent.

Herr Apel's financial plans are, moreover, threatened by a wide range of factors over which he has no influence, such as the exchange rate of the Deutschmark in relation to the dollar.

A dearer dollar will automatically add

## DEFENCE

# Bonn brains trust plays down empty coffers

to the Bundeswehr's procurement bill, while higher oil prices could add hundreds of millions of Deutschmarks to the defence budget overnight.

There is even the cost of maintaining complicated arms and equipment serviced by civilian firms; their charges too are subject to change.

In the final analysis Herr Apel's brains trust seems sure to be proved mistaken in assuming that the bill can be footed.

The Reagan administration's security policy is sure to put paid to all its reassuring assumptions. Bonn can hardly prunes defence spending now the Americans are increasing their outlay to an extent not seen for 20 years.

US defence spending is already posted at nearly \$7bn above Mr Carter's budget for the current financial year; next year's increase will be \$25.8bn.

America's defence budget at \$222bn, or DM477bn, will then be at its highest-ever peacetime level and scheduled to increase to \$367bn, or DM759bn, by 1985.

That is an increase of 12.4 per cent this year, 14.6 per cent in 1982 and seven per cent on average throughout the 80s. It is to be bankrolled via drastic cuts in the social services.

President Reagan's aides have already made it clear that if poor Americans are to make sacrifices for the sake of arms spending the rich Europeans will be expected to at least follow suit.

Were they to refuse to do so it would hardly be surprising if Senator Mansfield's old idea of bringing the boys back home were to be resurrected, but this time by conservatives.

America wants to see its allies step up

their defence showing and we will have to come to terms with the idea of plugging gaps left behind by Uncle Sam in Europe as US commitments are stepped up in the Middle East.

We will, for one, be unable to refuse because only Bonn's defence contribution can ensure even a modest say in President Reagan's formulation of Western arms and disarmament policies.

What is to be done in these circumstances? First, the perfectionism of the military must be brought under control and armaments rationalised. Second, we must aim at swift, serious and consistent arms control talks with the East.

Both moves must be made in the hope of forestalling a drastic increase in defence spending and in view of the need for rationalisation at home and efforts to come to terms with the East.

Opportunities of both must be fully utilised before the public will appreciate that we may indeed have to forgo butter and invest in guns instead.

Where perfectionism is concerned, brasshats tend to expect every new weapon to give 10-per-cent better performance even though that may increase the cost by 50 per cent.

No sooner than a new weapons system has been taken into service they start clamouring for improvements.

They are fascinated by technology like children are fascinated by model railways. Each and every new development by the other side, no matter how vague or unusual, is marshalled to justify their own extravagant demands.

The upshot is what in the United States is known as gold plating of new weapons until they are so sophisticated recruits can hardly handle them.

## Hans Apel's management consultant



Manfred Emcke (Photo: dpa)

Emcke can afford to allow his image to take a few knocks and bruises. He left Vorwerk with an ample golden handshake and as a shareholder in Schröder, Münchmeyer, Hengst & Co., the

The Tornado needs air-conditioned hangars, the Leopard Mk II also needs garages, so complicated are the new plane and tank become.

In the end only Saudi Arabia is able to use them, being the only one that can afford to pay private contractors' pay and, if need be, air-condition the entire battlefield.

It is high time for a rethink, not only in respect of perfectionism but with regard to armaments organisation.

Hitherto we have felt it was to entrust a general with a family-rear with responsibility for supervising armaments programmes.

An able Ministry official or a fine civil servant might be thought to be able to supervise projects for billions of Deutschmarks in expenditure.

The latest viewpoint is that planning is better entrusted to the sector-general of the Bundeswehr to the men at the helm of the respective services.

Yet we know that bureaucracy is teful and that, as the outgoing general in the Pentagon reckoned, a year could be saved by keeping a check on Defence Department expenditure.

Or, to take a European example, expert has gone on record as saying that the cost of the Tornado programme is being inflated by 20 per cent by bureaucracy and red tape.

Must arms planning really be entrusted to the tender mercies of rival military brasshats with their preferences, intrigues and compromises?

Many people who cannot, by stretch of the imagination, be seen to the left wing of the SPD are worried at this prospect.

A fresh starting point is badly needed. For years the fruitless data dump of the Vienna troop cut talks has been the Soviet Union to avoid withdrawal of substantial troop contingents from Central Europe.

Refusal to consider a moratorium Continued on page 5

Hamburg merchant bankers, he is of independent means.

He lives in the high-class Hansa residential suburb of Blankenese, his home overlooking the Elbe and his office on Ballindamm overlooking Alster, Hamburg's city-centre lake.

Since leaving Reemtsma he has worked from this prime office location in supervisory board member of companies at present, some of them in the electronics industry.

He regards the task of taking industrialists' look at the running of the Defence Ministry project as a fresh challenge.

He has no party-political affiliations and no political career ambitions. He has no overtaxation timewise. He also has no political career ambitions.

In this he will be emulating his father, who was appointed the first mayor of Kiel, by the British military government.

So Manfred Emcke is set to see Herr Apel on a number of projects, a nominal fee and with no official commitment.

All I can do is make recommendations and say how I would run things, he says. He is energetic, has shunned taking decisions and always not been long before he starts those recommendations.

Emcke can afford to allow his image to take a few knocks and bruises. He left Vorwerk with an ample golden handshake and as a shareholder in Schröder, Münchmeyer, Hengst & Co., the

## PROFILE

# Günther Diehl speaks out on ties with Japan

Many Europeans still see Japan as a little gnome who lashes out once while, but a gnome nevertheless, while its outgoing ambassador to Tokyo, Günther Diehl, in his usual picture way in a discussion on Japan.

The fact that Japan is so much talked about in Europe, he goes on, might have opened the awareness that the two economic powers in today's world are actually prepared to shoulder responsibility.

His theory put forward by some people in view of the economic problems that beset the world today, a refusal of political cooperation could prompt the economic sector does not hold water, ambassador holds.

The opposite would make more sense. If Europeans are prepared to co-operate with the Japanese they, too, will be inclined to listen to us.

Given a broad basis of mutual trust, cooperation should be fairly easy. In a case the Japanese would even be inclined to listen to us.

Comments the ambassador: "If something happens here, and such a possibility can unfortunately not be excluded, the EEC cannot even dispatch a destroyer to the Far East."

The Brussels commissioners, he says, refuse to understand that the Japanese will permit the Americans to say things which they will not tolerate from the Europeans.

Herr Diehl points to the European politician who referred to the Japanese as workaholics and said that they lived in rabbit warrens, something the Japanese have not forgotten or forgiven notwithstanding the fact that they are outwardly as friendly as ever.

Ambassador Diehl has the impression that there is something of a "we'll show you" attitude towards Europe among Japanese policy-makers, perhaps even a trace of pity.

The whole thing can best be summed up, as those people in Europe still have to catch up, but in 10 years they might get there.

The Japanese should not go overboard with their understandable pride and even self-righteousness, for they are as threatened as is Europe, says the ambassador.

The Europeans should also take Washington seriously when it says that America's most important relations with any individual country are those with Tokyo.

The Japanese have expressed themselves along exactly the same lines regarding America. They have also said that the Europeans still see America primarily as an Atlantic power, although a new gravitational field is forming in the Pacific.

Economic problems that might arise between Tokyo and Washington are put into perspective by the close political ties between the two countries.

Herr Diehl points out that there have been considerable changes in relations between Bonn and Tokyo.

The ambassador was startled by recent comments by Japanese politicians in

which they repeatedly said that current relations between Japan and the European Community corresponded to Japanese-American relations 10 years ago.

According to these statements, Japan's trade relations with the United States are unproblematic because of the all-pervading spirit of competition in America.

Says he: "When I first arrived here I was somewhat disquieted by the fact that most of the discussions revolved around economic issues and that the essence of relations between two countries, politics, was entirely in the background."

"This has now changed under the pressure of exigencies. We now again have political relations which extend right into the defence sector, an entirely new situation."

Diehl holds that Japan's defence forces, especially at sea and in the air, will greatly relieve the American forces in the Pacific in the next five years.

It is understandable, he says, that Tokyo is playing a bit coy with regard to Washington's demands for more military spending, but then, it was America that opposed the rearmament of Japan after World War II.

Psychological barriers hamper any discussion on the role of the armed forces in Japan; but the manner in which the Japanese government is preparing the public indicates that Tokyo wants to shoulder more military responsibility.

Says Diehl: "Whether Japan will ever become a major military power comparable to its economic potential remains to be seen."

Japan's perseverance in pursuing long-term goals is most impressive, says the ambassador. The Japanese are pragmatists and they know that serious mistakes can be made unless one has some sort of a compass.

This is evident in Tokyo's dealings with Moscow, primarily the tug-of-war over the four northern islands.

Japan's attitude has become tougher and, seen from Tokyo, the Soviet Union acquires traits of a colonial power in Asia.

Says Diehl: "Yet it is obvious that the colonial era is over. The Sino-Japanese Treaty of 1978 is exemplary for Japan's firm policy. Moscow made an all-out effort to prevent this treaty, but its methods were too crude."

Diehl has been watching the development of an attitude in Japan which, though not actually unfriendly and still displaying some willingness to cooperate, is unyielding.

Japan does not believe that yielding will result in "good behaviour" on the part of the Soviets.

The Japanese also don't think that they are big enough to be able to change Soviet attitudes through cooperation.

The ambassador cites the Japanese restraint regarding Soviet offers of a natural gas deal and similar deals regarding uranium. As things now stand, Japan does not depend on the Soviet Union for a single ounce of its uranium.

Though this is not necessarily an attitude to be emulated, it is very impressive and has in no way harmed Tokyo-Moscow relations, says Herr Diehl.

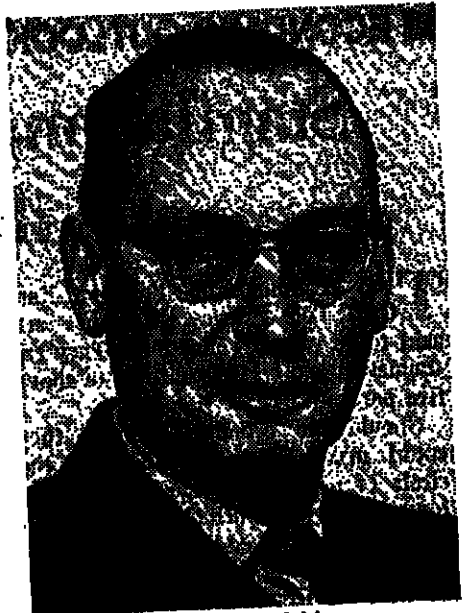
Naturally, the situation in Europe is different. But Ambassador Diehl is unimpressed by the fact that Moscow's position in the Pacific region is weaker and more threatened.

The ambassador, who is 65, is about to retire. But back in Germany he will continue to occupy himself with the focal point of world politics in the Pacific region.

He will play a major role in a quarterly magazine Asia that is expected to be launched by the end of this year.

The new publication could greatly help to fill the information gap that exists among Germany's elite.

Karl Wagner (Frankfurter Allgemeine Zeitung) for Deutschland, 28 February 1981



Günther Diehl (Photo: dpa)

## An exemplary civil servant

Bonn's ambassador to Tokyo, Günther Diehl, is about to retire. His career has had its ups and downs, having started during the war when he gathered his first experience as a young diplomat accredited to the Pétain government in Vichy.

Bonn displayed a long memory for what it considered a blot on his career, and this was the reason why he was not appointed as ambassador to Paris, a post many of his friends had wished for him.

Günther Diehl was one of the first spokesmen of the German Foreign Office, from 1952 to 1956, a post which usually leads to higher offices within the hierarchy.

He was also the foreign policy speech-writer to Konrad Adenauer.

With his unusual political instinct, he predicted the failure of the European Defence Community and was one of the early proponents of Germany's NATO membership, thus opposing Konrad Adenauer and Walter Hallstein.

Diehl was proved right but he failed to earn much gratitude for it, finding himself in the number two post at the German embassy in Chile.

He never complained nor has he ever been known to cry over spilt milk, not even in 1970, when he had been government spokesman of the Grand Coalition (together with his friend Konrad Adenauer).

When the SPD and FDP came to power Bonn sent him to India, as far away as could be managed. Diehl was viewed with mistrust because he was a CDU man and a confidant of Kurt Georg Kiesinger.

But Günther Diehl was never just a run-of-the-mill politician. He was, a rare quality nowadays, an exemplary civil servant. A man of boundless loyalty and with a perceptive, critical mind who mingled no words with his superiors.

Thanks to his personality, all attempts to isolate him politically were doomed to failure in the long run, in fact, wherever he was, politics was happening.

Whenever Günther Diehl left a post, that post had gained in lustre to an extent the Foreign Office never intended. This was so in New Delhi and it is so in Tokyo.

He was a grand ambassador. The rest of his life will now be spent in Bonn and his political instinct, his wit and his raconteur's art will add lustre to Germany's capital as well.

(Die Zeit, 4 March 1981)



## ECONOMIC OUTLOOK

## Stagflation, devaluation and the EMS

Two of Bundesbank President Karl Otto Pöhl's many headaches are said to be worrying him most. They are stagnation and an inflation rate of about five per cent.

Should the economy improve they could make West Germany join the circle of nations that have been living for years with much higher inflation rates and grown used to them.

Both these worries are indirectly linked with the fact that the deutschmark, as the *Financial Times* puts it, has become the world's second reserve currency, the dollar being the first.

This role, which until the end of the 1970s was played by sterling, has burdened Germany with the problems that were partly to blame for Britain's industrial and economic decline over the past three decades.

Britain's economic policy is best described as stop and go, in other words a series of measures to boost the economy which were doomed to failure because inflation forced policy-makers time and again to step on the brakes.

Recent ups and downs in the dollar-deutschmark exchange rate have been due to the fact that not only speculators (major companies, banks and to some extent individuals) opt for deutschmarks when they want to switch from dollars and vice-versa but also a number of central banks.

The sterling exchange rate (the pound still being a reserve currency of sorts) moves more or less parallel to that of the dollar while the Swiss franc (also a reserve currency) tends to move in line with the deutschmark.

Seen from an economic vantage point, the depreciation of the deutschmark until the end of January was beneficial insofar as it made German exports cheaper on world markets and hence more competitive.

But it was also bad because it made oil and other imports more expensive and speeded up the imported variety of inflation.

All in all, the disadvantages outweigh the advantages by far because half Germany's exports go to the European Community, where the depreciation of the deutschmark has been checked by the European Monetary System (EMS), which permits only minor exchange rate fluctuations.

What this means is that German goods did not become cheaper for EEC buyers and, vice-versa, goods imported from other Community countries were not noticeably costlier in Germany.

One of the peripheral phenomena is the fact that in 1980 Britain, not part of the EMS, for the first time had a positive balance in its trade with Germany notwithstanding the high sterling exchange rate since mid-1980.

This is one of the reasons for the growing inclination in Britain to join the EMS since Germany has developed into its most important trading partner.

There are economists in Germany who still consider the EMS detrimental to the economy.

The system was devised in 1978/79 by Chancellor Helmut Schmidt and France's President Valéry Giscard d'Estaing. They were not guided by any West European unification enthusiasm but had to act under the impact of President Jimmy Carter's nationalistic and unsuc-



Successful economic policy and its effects on the world's foreign exchange markets.

One of Schmidt and Giscard's long-term aims was to use the EMS as a basis for a new international monetary system that would eventually include the dollar and the yen.

Unfortunately, one of Germany's major objectives in connection with the EMS has failed to materialise. German policy-makers had hoped that the deutschmark as part of the EMS would also be protected from excessive fluctuations against the dollar.

While the EMS currencies as a whole act as a buffer against the dollar, the Bundesbank is left virtually alone in defending the deutschmark against the American currency.

It has been doing so consistently for months by engaging in interest rate warfare, initially through the discount rate and latterly with other methods of making credit in short supply (the latest Lombard decision).

This tight money policy hampers an economic upswing which is so sorely needed if unemployment is to be licked.

Yet the EMS necessitates a stringent tight-money policy because the move into the dollar world-wide puts pressure on the deutschmark while the EMS precludes its exchange rate against the other member currencies from dropping below a narrow margin.

In December and January, France rejoiced in the strength of the franc against the weak deutschmark. But when the dollar depreciated it became obvious that instead of the franc being strong it only appeared so because it remained unaffected when investors switched from deutschmarks to dollars and vice versa.

A discontinuation of the EMS, though theoretically possible, has little to recommend it. Should exchange rates be permitted to fluctuate wildly, trade within the EEC would again be full of uncertainty in a time of economic decline and so lead to further unemployment.

A further step, originally planned for this March, had to be abandoned last year. Schmidt and Giscard had originally intended to transfer national central bank sovereignty to an envisaged EEC central bank.

But they decided against it, much to the dismay of the other Community partners, because Giscard considered it risky in view of the forthcoming presidential election in France.

Schmidt was motivated by the same considerations prior to the German elections last October.

## Bonn brains trust

Continued from page 4

medium-range missiles, even a moratorium to last no longer than until Pershing II and Cruise missiles can be deployed in Europe, has merely allowed the Soviet Union to go ahead regardless with deployment of SS-20s.

President Reagan's scepticism about

The danger of the British disease being caught by Germany, a country with a reserve currency, can only be lessened or averted through an EEC monetary union.

The second stage of the EMS was to be marked by the transfer of some of the foreign exchange reserves of the member-nations to a European Monetary Fund.

In addition, the governors of the fund (the central bank presidents of the member-nations) would have rights resembling those of central bankers and the Ecu, the European accounting unit, would increasingly be used for international currency deals.

Had this second stage been realised, the European Monetary Fund could have arranged swap credits with the US Federal Reserve Bank for the mutual support of the currencies involved. At the moment, such deals have to be made by the Bundesbank.

If swap deals were made between the European Monetary Fund and the Federal Reserve Bank all EMS currencies would act as a buffer against the dollar.

As a result, dollar-deutschmark exchange rate fluctuations would have less impact on the EMS members, meaning that the money and interest rate policy of the Bundesbank could again be adapted to the needs of the economy.

This, of course, also applies to the other EEC members.

Now, countries such as Belgium are indirectly forced to impose even higher interest rates than in Germany to defend the Belgian franc against the deutschmark which, in turn, has to defend itself against the dollar.

If the British pound were to become part of the EMS and if the "second stage" of the EMS were realised, the international foreign exchange markets would calm down.

The dollar fluctuations during the Carter administration and the transition to the Reagan administration show that the so-called "faith" in a currency is partly irrational and partly determined by a wide range of factors.

During the Carter era the dollar kept declining although America imported only half its oil requirements.

The deutschmark weakness between December and February was not only due to lack of oil and the deterioration of the balance of payments.

By the same token, the strength of the pound was not due only to the North Sea oil and the thus improved balance of payments.

Nor is the strong dollar due to President Reagan's "strong America." After all, the dollar started declining as soon as Mr Reagan announced his new economic policy.

Like Britain after 1958, West Germany is too small to support an international reserve currency. But even the embryo of a future EEC currency could become a genuine counterbalance for the dollar if the EMS members agreed to go ahead, says a leading Belgian monetary expert.

Erich Hauser

(General-Anzeiger, 4 March 1981)

## Bundesbank BUSINESS

## brakes Hamburg stock exchange is over 400 years old

For the past two weeks, the bank has been keeping the rate at an even shorter leash than it did.

The rate for overnight money is 30 per cent. Granted, the central bank tried to ease the money through swap deals but this did not work well.

As a result, the Bundesbank had to give the banks a second sharp credit at 12 per cent, while the money market somewhat improved.

Still, all things are relative. Interest rates are even higher, standing the fact that Citibank reduced its prime rate to 18.5 per cent.

But even this leaves virtually no room for reduced interest rates in 1981 because the dollar exchange rate is again.

The Bundesbank's latest monetary decision is already starting to lose its international currency specificity.

The dollar recovered from its earlier and is now up 8 per cent. It means that the deutschmark is out of danger and that the Bundesbank will stick to its tight money policy despite the slackening economy.

The surprisingly good performance of the stock market on 3 March should be taken as an indicator of a better mood. It was only foreign buyers who showed interest in certain branches of industry that accounted for the rise.

(Der Tagesspiegel, 4 March)

## Stock markets batten down

The German stock market is susceptible to changing moods. Small wonder, considering the fact that keeps coming in daily, and good news there is short-lived.

Kiel economists expect a two-year decline of the GNP this year, as the European Community now for the time anticipates zero growth in 1981. What hope there is pinned on a year.

As a result, there is a total lack of optimism that would make rise in stock market quotations. The fact that investment has declined only slightly is now used as a black magic formula to induce upward move on the stock market.

But Germany's capital goods industry is very cautious as to its prospects. Constant interest rate rises also have an adverse effect on the stock exchange.

The latest government bonds yield 12.5 per cent have again ushered in their interest-rate increases.

If Bonn, with its empty coffers, pay this kind of interest, it is only that interest rates will not be brought down in the foreseeable future.

Even steel, which performed well lately, has gone down. Steel rallied for a day or so when it was announced that the EEC countries would stop subsidising obsolete mills in 1981.

The news that German steel had demanded massive support, then down again because it is the fact that the German steel industry not feel equal to the distorted conditions.

(Der Tagesspiegel, 7 March)



Year of the Lord 1558," the report of the Stock Exchange.

The honourable council of the Hamburg granted the city's right to establish at their market place off the Trost 112 feet by 42 feet so large wagons can pass each between the square and the

honourable council has also in order that no goods or money benches be permitted in the

since no means are available for establishment of the market place merchants have called on each other out of danger and that the Bundesbank will stick to its tight money policy despite the slackening economy.

The surprisingly good performance of the stock market on 3 March should be taken as an indicator of a better mood. It was only foreign buyers who showed interest in certain branches of industry that accounted for the rise.

The surprisingly good performance of the stock market on 3 March should be taken as an indicator of a better mood. It was only foreign buyers who showed interest in certain branches of industry that accounted for the rise.

(Der Tagesspiegel, 4 March)

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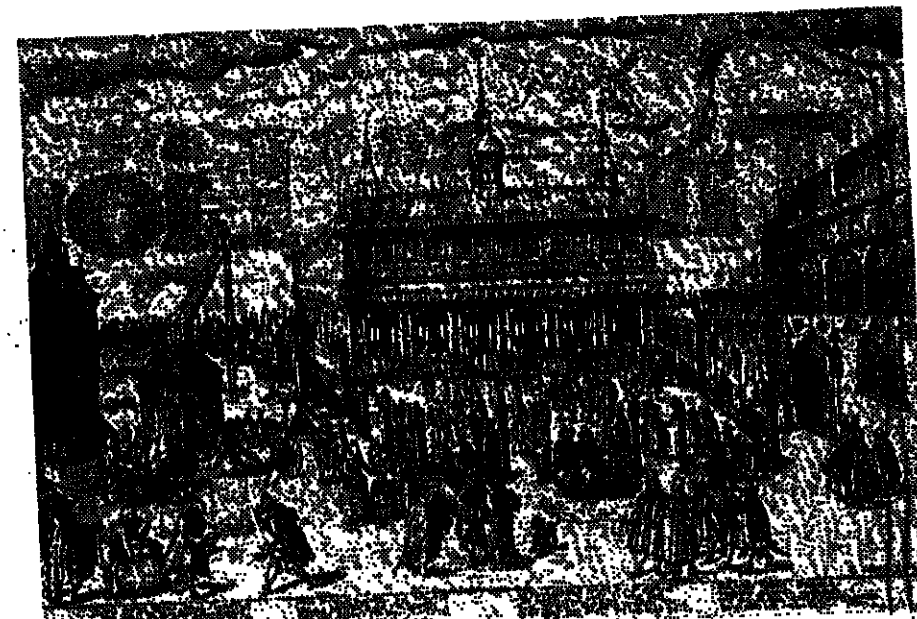
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The oldest surviving print of Hamburg's stock market, which began in 1558 with open-air trading; the original exchange building in the background was not built until 1677-1683.

Railroad Company in 1844. In the years to come the Hamburg Stock Exchange became the leading institution of this nature in Germany, especially for securities relating to shipping and spices.

The Lübeck exchange was established about half a century after that in Hamburg. There, too, trading was done in the open.

The first roofed-over exchange was set up in 1673 in the former Lübeck arsenal "because this place is very comfortable, especially in the summer with its mid-day heat and in the autumn and winter with their unpleasant snow, hail, rain and thunderstorms," a report of 13 June 1672 puts it.

Lübeck's trade in securities was turned over to Hamburg in 1934. This was taken into account in Lübeck's new trading regulations of 1 August 1937.

Section 1 reads: "Trade with securities and foreign currencies may not take place at the Lübeck exchange. So far as this trade is concerned, Lübeck is to be deemed part of the Hamburg Stock Exchange."

Though the new regulations permitted Lübeck to trade in commodities, real estate, mortgages and ships, "general conditions preclude trading in securities," said a 1937 report.

From then on, Lübeck orientated itself by Hamburg. But this was cumbersome and difficult, especially in the war years when the Hamburg exchange was partially destroyed in an air raid.

Reconstruction did not begin until

## Keen to persuade new companies to go public and be listed at a local stock exchange

The Hamburg Stock Exchange now sees its main task in listing new securities and recruiting new members as well as promoting public interest in securities as a form of investment.

The last annual report says that it will become even more important in the future to convince public companies of the advantages of trading at a local exchange.

Regional exchanges, the report says, are in the best possible position to help local companies acquire the necessary capital. Stock exchange publicity serves not only the market itself but also promotes confidence in a company and protects investors, thus furthering capital formation through securities.

The fact is that stock plays a very minor role in Germany's private investments, amounting to barely five per

cent. Even so, five million Germans are stockholders.

A recent study shows that the number of German stockholders has risen by more than 50 per cent in the past 10 years. Fifty German companies now have more than 20,000 shareholders each, the 10 largest ones having more than 100,000.

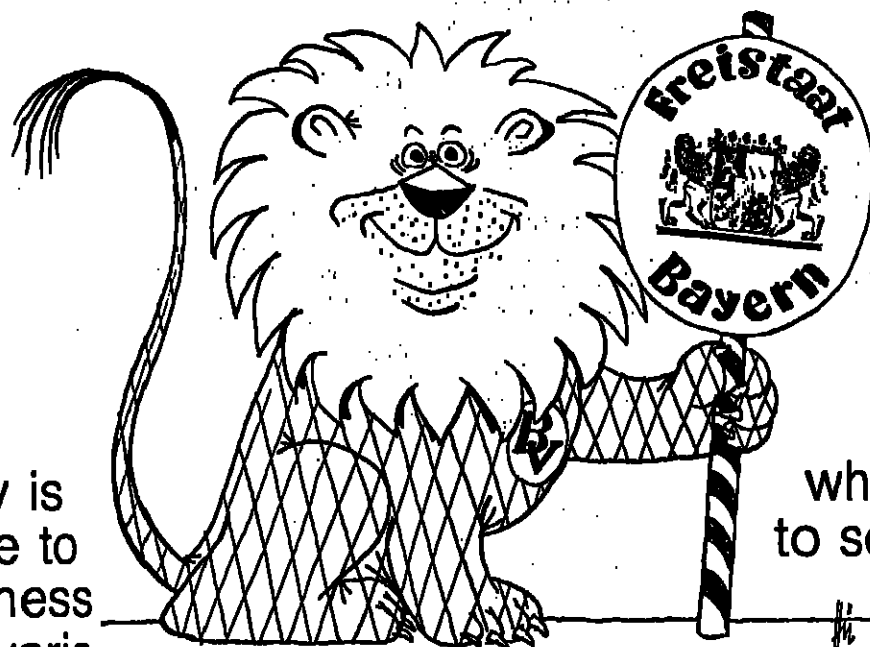
At the top of the list are Veba, with 800,000 shareholders and Volkswagen with 590,000. Lübeck's Drägerwerk occupies place No. 25 and 50,000 shareholders.

This is the more amazing as that company only went public two years ago and now has more shareholders than Conti-Gummi, Klöckner, BMW, Luft-hansa, Allianz, Kaufhof, Neckermann and Karstadt.

Achim Hainisch

(Lübeck Nachrichten, 4 March 1981)

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### ENERGY

## Kiel biochemist plans to harness osmosis

Kiel University biochemist Bent Havsteen backs osmosis as a novel and possibly revolutionary source of inexpensive hydroelectric power. Cost-benefit estimates he has submitted to the Schleswig-Holstein Land government in Kiel certainly sound impressive.

He expects his power station to have a life-span of a century and to cost six per cent of the value of the electric power it produces to run. Osmosis is the unilateral diffusion of liquids or gases of different concentrations via a semi-permeable membrane resulting in the difference in concentration being offset.

It is the way in which matter is, for the most part, transported from one vegetable or animal cell to another, liquid from the roots of a tree to the tree-top, for instance.

The special feature of the membranes is that they only allow molecules of the solvent through, say water, whereas the larger molecules of, say, salt are retained. Water molecules thus pass through the membranes into the stronger concentration until a balance is reached.

In nature this principle is a vitally important way in which water from surroundings is absorbed by the organism, the semi-permeable character of cell membranes allowing water into the cell. Salt, sugar and other organic compounds can only pass through the membranes at special "windows" with the aid of active transport mechanisms. They are only let out by diseased cells.

An osmotic process with which everyone will be acquainted is the way in which dried split peas and lentils are soaked before cooking.

Scientists have conducted research into osmosis to put paid to internal dis-

eases and post-operation liquid loss. Professor Havsteen hit on the idea of using the principle to generate electric power as an afterthought, so to speak.

He envisages an array of osmosis chambers being set up at a point where fresh water and salt water meet in large quantities: in a river estuary. He has the Elbe estuary in mind.

Membranes with a surface area of roughly one square metre are to be installed between chambers of fresh and salt water. Fresh water will pass through into the salt water.

Cellulose acetate membranes will withstand pressures of up to 45 atmospheres. In other words, pillars of water up to 450 metres in height could be created in this way.

Since towers of this height would doubtless be somewhat expensive Professor Havsteen envisages combining membranes on platforms 25 square metres in area.

This would still make it possible to form a pillar of water 25 metres tall. Diluted salt water could then be allowed to spill over and drive turbines.

One such small power station could, he says, generate enough alternating current to provide household electricity for 120,000 people.

If the 2,000 cubic metres per second the Elbe releases into the North Sea were fully harnessed in this way, power for three million households could be generated: either Schleswig-Holstein in its entirety or Hamburg and its environs.

Two hundred litres of fresh water per minute would pass through a membrane one square metre in size. This relatively high speed is reached because salt molecules are enclosed in water molecules.

This enables the water to move faster, the speed of osmosis relating to the sur-

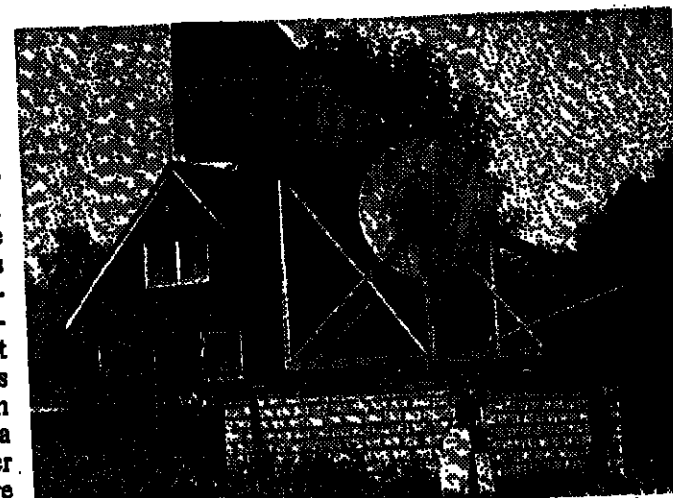
face area of the metallic components in the salt and their diameter. These figures being known quantities, Professor Havsteen has been able to demonstrate this, his osmosis speed theory, experimentally in respect of 25 different salts. His results have also been borne out by a number of filter processes. In future large-scale filtration, which used to be one of the most expensive and least easily costed industrial operations, can be estimated more exactly. The idea of converting the chemical energy of water into electric power without affecting the make-up of the water in any way is an intriguing prospect. What is more, Professor Havsteen's idea has the advantage of being one that could be put into practice anywhere.

It need not be limited to the mouths of rivers. Inland it could conceivably be based on a combination of fresh water and effluent.

Coastal countries with a shortage of fresh water could set up osmosis plant on board ships and use polar icebergs as a source of fresh water. To avoid the expense of shipping the energy thus converted into electric power, industrial plant for energy-intensive processes such as smelting aluminium or manufacturing ammonia could be set up on other ships.

Only the finished product would then need to be transported from the factory ships to the consumer countries. Professor Havsteen's idea clearly indicates that serious attention must be paid to all reproducible sources of energy now and in future. Jörg Feldner

(Kleiner Nachrichten, 11 March 1981)



## One man's power station

This wind turbine devised by retired teacher Alfred Flint and built in the back garden of his home on the Baltic island of Fehmarn is made of used combine harvester parts. It generates enough power from the wind to run his lighting and his electric cooker and to preheat the water for his central heating.

(Photo: dpa)

## Incinerator to heat village

Stapelfeld, a village of 1,300 people on the outskirts of Hamburg, is to invest an estimated DM10m in central heating from a garbage incinerator.

"A measure of pluck and good will are needed to embark on this project of the century for the village," says burgomaster Gerhard Stehr.

How right he is! The village has an annual budget of approximately DM1m. A project costing at least ten times as much is a toe-biter for such a small community.

The project will include a heated swimming baths near the incinerator but the main feature will be a 22-kilometre central heating network for the village.

Burgomaster Stehr says this idea of making Stapelfeld independent of other sources of increasingly expensive energy can only be implemented if everyone joins in.

This is the case. Each of the 350 homes will need to install mains heads costing DM8,000, yet 96 per cent of the villagers have agreed to back the project.

Herr Stehr is confident Schleswig-Holstein and Bonn will subsidise his pilot project. "Subsidies are certainly available for insulation and other energy-saving measures," he says.

To cut costs the heating network will be laid in people's gardens rather than under the road. The annual running costs for a house with 100 square metres to heat is expected to be about DM2,000.

This will be cheaper than oil-fired central heating the moment oil costs more than 70 pfennigs a litre, which cannot be more than a matter of months.

Harnessing process heat from the incineration of garbage will also save about 1.5m litres of heating oil a year. The garbage incinerator started work in 1978 and serves 650,000 people in Hamburg and the neighbouring administrative districts of Stormarn and Lauenburg.

In conjunction with the Stapelfeld central heating scheme it could set an example. It was designed to incinerate 260,000 tonnes of trash a year, but last year handled 310,000 tonnes.

In the process its turbines generate 110 million kilowatts of electric power a year. It will now supply market gardeners and an entire village with heating from part of the process heat that previously went to expensive waste.

(Hannoversche Allgemeine, 4 March 1981)

## Wind power in its infancy

Eight years ago a windmill was converted into a miniature power station on the North Sea holiday island of Sylt. It consisted of two interlocking rotors each with ten steel blades.

They were 11 metres in diameter and mounted on a tower 12 metres tall, rotated vertically in the wind and were designed to generate enough electric power to keep five houses continually supplied with current.

Sad to say, this pint-sized power station is now a mere ruin. Wolfgang Schmidt, the Sylt engineer who supervised the project electronically, says the wind proved too unpredictable.

From one second to the next it could turn and reach speeds as to wreck the generator. Differences in wind speed in various layers of air can prove particularly treacherous.

The risk is even more incalculable when the rotor exceeds a certain size. Wind power stations thus need constant supervision. Whenever a control system breaks down they can be wrecked in a matter of minutes.

In the event of a short circuit or resistance failure no-one can take the rotor out of the path of winds that could prove its undoing.

Herr Schmidt says the continual change in conditions at the base of rotor blades is a particular problem. The longer the blades are, the more incalculable they are.

No-one, he says, knows what a wind generator design should look like that is intended for use at wind speeds of up to Force 10 but to withstand speeds of up to Force 14.

"I am convinced wind energy can be harnessed," he says, "but current equipment stands very little chance of delivering the goods."

North Frisia, the administrative district that includes much of Schleswig-Holstein's North Sea coastline, is one of the most windswept parts of the country.

Senior local government officer Klaus Petersen says every application to operate a wind power station is individually checked.

As the law stands applications must be refused in built-up areas because of the danger to neighbouring residents. Will wind power ever play a major role in energy supplies? Growlan, a project under construction near Brunsbüttel at the North Sea end of the Kiel Canal, should provide an answer.

Growlan, a project backed by the Bonn Research Ministry, is, however, unlikely ever to generate more than supplementary or substitute energy, and that on a scale no more than modest.

(Die Welt, 9 March 1981)



## THE ARTS

## Chinese warriors star in West Berlin

The Ancient Chinese warriors now on show in West Berlin testify in a monumental yet strangely fragile manner to an unknown China of strict religious and collective traditions.

What makes the larger-than-life painted clay warriors only recently excavated in China so sensational is the number unearthed at the main site in Shaanxi province.

Seven thousand of them guarded the grave of the first Chinese emperor, Qin Shihuang Di, the founder of a short-lived dynasty that until 1974 was thought to have been of no artistic importance.

With the discovery of the emperor's grave and his clay warriors at Yangliuwan the Qin dynasty has come to assume an artistic importance that has yet to be fully assessed.

The warriors form part of the first touring exhibition ever sent to Europe by the People's Republic of China. They were first exhibited in Zurich and are due to transfer from West Berlin to Hildesheim and Cologne before leaving Germany for other European countries.

The show consists of about 120 exhibits from six millennia of Chinese art and culture, all first-rate items. They all hail from the Yellow River, China's heartland, and for most part have never before been seen in Europe.

They range from neolithic pottery and the bronze art of the Shang period (13th to 11th century BC) to the wonderful ornamental art known as Taotie and dating back to the Zhou dynasty (11th to mid-3rd century BC).

Then, suddenly, there is a jump in time and subject matter to the human representation of the Qin dynasty (220-210 BC).

What comes as a surprise is that individual examples of plain, classical series production do not have a mass-produced look about them.

An archer on his knees, for instance, by no means conveys the impression of having risen from a cult of the dead. The standing leather-clad warriors look distinctly human too.

Of course, they are not seen here in their thousands, as at Yangliuwan. Their empty hands must have held weapons that have not survived; they may well have been looted by rebels not long after the emperor's death.

What a wonder it is that the figures have merely shed their colour in the centuries they have spent submerged in desert sands.

Yet they retain the finely sculpted facial features, probably the artists' finishing touch, and artificially plaited hairstyles.

They are both eloquently realistic and dignified testimony to the armed forces that formed the backbone of the empire and to the idealization of a strategic collective spirit.

It flourished under a God-Empowerer who had called for this gigantic mausoleum so true to life on ascending the throne as a mere boy.

He added Taoist magic to the Confucian tradition. He also abolished the privileges of the nobility. He certainly employed hundreds of thousands of workmen to carry out the grand projects designed by the foremost architects he as a

conqueror and dictator was able to gather round him.

This unknown period of Chinese history that comes to life is not the alien Asian world Far Eastern art and civilisation so often taken to be.

Since the Rococo period the courts of Europe have been overwhelmed with Chinoiserie. What would European china manufacturers of the 18th and 19th centuries have done without their Chinese models?

But they gave us a mistaken impression. Only now, by virtue of the exemplary and successful work of Chinese archaeologists, can we see that in Ancient China there was a continuous evolution of styles and topics, probably uninterrupted.

It is by no means merely a matter of ornaments and ceremony. Received ideas must be widened in scope or abandoned entirely. Art history must rethink. Maybe some of the glory that was Ancient Egypt will pale.

Court and camp life as depicted by the statues will doubtless have been welcomed by Chinese archaeologists because it is so plain to see and so of the people.

The incredibly lifelike horses are even more impressive than the warriors. With their heads held high, either neighing or snorting, they are invariably superior to the riders as portrayals of nature in motion.

Is there an independent contemporary Canadian art scene, independent, that is, of the all-powerful influence of New York? Little evidence of one has crossed the Atlantic to Europe.

Individual artists from Canada have been shown at the Kassel documents and the Venice biennale, but it has been hard to gain any clear idea of a Canadian art scene.

At the end of 1980 the Art Gallery of Ontario arranged an exhibition of work by 10 Canadian artists of the 70s that is currently on show at the Rockinghamhaus Kunsthalle.

The exhibition is limited to a relatively small number of artists with a view to showing as many works as possible by each, and rightly so because the impression is heightened.

Despite an inevitably arbitrary selection they represent Canada in its entire geographical extent, from the Atlantic to the Pacific.

The 57 exhibits, mostly large paintings, sculptures, drawings and the like, undeniably are influenced in part by New York.

But the power and independence to which they also testify are predominant and overwhelming. Basically, each work on exhibit calls run-of-the-mill views into question.

The gigantic paintings of Paterson Ewen, born in Montreal in 1925 and a resident of London, Ontario, are quite amazing and bear comparison with nothing previously known.

He applies acrylic paint to untreated wood he has chiselled hollows, furrows and holes into and does so in a half-facile and abstract and half-objective manner.

His topics comprise universal and elementary processes in nature and the universe. They are depicted on a large

Troops in battle array have been found in excavations to the north-east of the Qin finds and dating back to the early Han dynasty.

They consist of two dozen warriors in miniature, almost the size boys play with, and retaining their original colour. Behind the commanding officer, who is standing, there are bandmen, two rows of footsoldiers and the cavalry who so often clinched a battle in Ancient China.

Entirely new finds in pottery are also on show alongside religious jars dating back to the fifth millennium BC and conveying a well-nigh expressionist impression.

There are large and colourful horses, imaginative camels, servants, musicians, mandarins, and all are portraits rather than merely stylised.

Side niches in the gable of Princess Yongtai were full of horses and riders with tall caps. There is a seated lady wearing a green, flower-patterned dress and with arms raised putting on her make-up.

She dates back to the Tang period and is a particularly fine example of statuary in the round. From the rear she is as finely finished and proportioned as from in front. Her profile is superb.

There is a small collection of selected superb marble Buddhas and Liang paintings of Jades and palace guards, polo and hunting.

The range of exhibits conveys some idea of changes in style, with additions that make sense. Yet the warriors unearthed in 1974-1976 will steal the show.

Peasants in a production brigade from Yanzhai people's commune first discovered the earthenware army, an Imperial guard of 2,200 years ago.

Even now archaeologists working in



Lintong warrior, Qin dynasty

three sectors have yet to unearth more than a fraction of the 7,000 warriors who were to protect the Emperor Shihuang Di, so keen to attain immortality, in the world beyond.

The mausoleum, nestled below a metre hill, has yet to be opened. Remains of it that can be seen in the sand indicate that it is shaped in accordance with the cosmic world model with a pyramid-shaped world mountain in the centre.

What has so far been retrieved from the emplacements the clay army was designed to defend indicate the troop formation and the art of war.

The majesty of the Imperial palace may one day add to the historical picture of the first emperor of China (maybe the most important one).

The People's Republic of China is beginning to show pride in its artistic past.

Hedwig Rohde  
(Deutsches Allgemeines Sonntagsblatt & Magazin)

## Contemporary Canadian art on show

scale in colourful painting and primitive, expressive, powerful and spontaneous gestures.

His world invariably captures an almost naive, strong sense of surprise or of being wildly impressed by the phenomena depicted, as in his Waxing Moon (1980).

It takes up almost the entire surface area of a large painting and is yellow-orange in colour and filled with patterns.

Van Gogh's Room, by Murray Favro, born in 1940, is also most surprising. It is one of a group of similar works the artist has put together since 1970.

It consists of three-dimensional wooden imitations of the lopsided, rickety furniture in van Gogh's painting, a bed, chairs and a table.

A colour slide of the original painting is projected on to the mock-up of the room, which becomes a real environment. Indeed, you can set foot in it.

David Rabinowitch, who now works in New York, transformed one of the balanced two-dimensional works by Mondrian into a steel sculpture that unfortunately is only on display photographed; it proved too difficult to ship across.

From one vantage point only does the sculpture put across the final and absolute order that Mondrian postulated in art and life.

Unity is thus only acknowledged as a possibility; it cannot be immediately experienced, merely "in a world of perfectly fulfilled dreams" (Rabinowitch).

The artist thus sees his work as a criticism of idealism. Recent drawings, his on the Construction of Violence, also on show.

The sculptures and drawings of his brother Rayden Rabinowitch combine intellectual concept and a high degree of aesthetic sensitivity.

His sparing, abstract work is seen tirelessly in perspectives of the human body. It probes the scope of human vitality, so different from that of machines.

The sticky mass of black paint he congeals in dabs and layers on his Martin's paintings, excluding all transparency and reflecting light on the surface if at all, conjures a trauma of a phylaxion in the heavy, sludge of matter.

The work of Michael Snow, who recently had a one-man show in Rome, in contrast as manifold as the media combines, including painting, sculpture and photography.

In Snow's work reality is both affirmed and most intelligently called in question.

In amusing transitions and Colin Baxter, who also goes by the name of N. E. Thing Co., likewise combines photography, drawing and painting, creating a teasing puzzle of nature, reality and illusion.

Jack Bush, the oldest of the artists, died in 1977, has much that is truly ubiquitous in his seemingly windswept paintings, painterly gestures.

Colourful, weightless, floating surfaces, blackish, billowing backgrounds, may be viewed objectively, but they are not.

Frankfurt's Ernst-Reuter-Schule has undertaken the interesting experiment of inviting serving members of the Bundeswehr to brief pupils on the armed forces.

It followed an exchange of views between conscientious objectors to military service who were doing alternative work in social services and a visit to a Bundeswehr barracks by a class of 16-year-olds.

About 30 men of an engineering battalion in Hartheim, near Frankfurt, drove into the school yard Thursday morning in two vans.

Horst, who teaches polytechnical subjects, outlined the idea behind the visit as follows.

The teaching staff themselves found the defence policy debate a demanding task. What with the neutron bomb and medium-range missiles, arms experts and missile deployment they hardly knew what to say.

How were they going to explain to their pupils the meaning and purpose of the Bundeswehr? Maybe face-to-face talks with serving members of the armed forces might at least help put Adolf Konrad, a physics PhD and company commander of a unit that maintains and repairs electronic equipment, likewise felt the visit was a pilot project.

Major Konrad hoped it would put an end to routine civics briefings in the Bundeswehr. It must certainly prove an interesting departure from routine.

The soldiers arrived at the school showing signs of uncertainty. They were expecting to face an exacting grilling by not until working parties had been

## EDUCATION

## Frankfurt school holds talks with Bundeswehr unit

set up to discuss individual issues did they begin to feel more relaxed.

The issues dealt with included Training to Kill, Women in the Bundeswehr, Citizens in Uniform and the Bundeswehr in Nato, and in many instances there were no holds barred.

Keen interest was shown by girls (and not only on the subject of women in the Bundeswehr) and pupils of foreign nationality.

Before long, soldiers seemed to have taken over in the chair of their discussion groups, but they by no means nipped discussion in the bud, as pupils readily admitted.

The groups were not intended to reach conclusions of any kind, but they did outline for the class as a whole the main details on which views had differed.

Here too, in two cases, soldiers were voted spokesmen for their respective groups, by mutual agreement of course.

Two fundamental problems emerged. There was clearly a pupils' viewpoint on the one hand and a soldiers' viewpoint on the other. There were also differences of opinion among pupils.

On Training to Kill, for instance, the Bundeswehr argument was the time-honoured claim that training to kill was essential to keep the peace and uphold freedom.

There was a widespread clash of views between pupils who called the need for

the armed forces into question and soldiers who were equally convinced they were necessary.

Pupils were not all of one mind, however, while soldiers too turned out not to be fired with limitless enthusiasm for defending the country.

In conversation many admitted that as far as they were concerned the Bundeswehr was a job like any other. They appreciated its career training opportunities and hoped to fare better on the job market when they returned to civilian life.

Before spending the night out in Sachsenhausen, the Frankfurt suburb, both groups attended a lecture by the chamber of commerce and industry on Frankfurt as an international business centre.

After a day's heated debate this was not, perhaps, the best of ideas. The speaker sounded like he was spouting a brochure he had learnt off by heart, one girl said.

Then the soldiers, no longer in uniform, toured the local bars and discotheques. Many a talking point discussed

in the course of the day was discussed over a glass of beer too.

Both pupils and soldiers showed distinct signs of that morning-after feeling the following day. Councillor Mihm, Frankfurt's ranking education official, looked a little tired too.

He had burnt the midnight oil at a lengthy session of the city council and delivered a short speech to the party in the Römer, Frankfurt's city hall.

He advised them not to view each and every issue as a problem. The Bundeswehr, he said, was part and parcel of a democratic system.

Then came a guided tour of the city and a visit to Rhine-Main International airport. By this time both pupils and soldiers were beginning to feel a little brighter. The soldiers showed keen interest.

They parted company at the airport, soldiers saying they would be happy to pay visits of this kind whenever the opportunity arose.

Many pupils agreed that the encounter had been most stimulating. Soldiers from Bavaria and Württemberg were impressed by the school. It was the first they had ever seen of a comprehensive school. Videotape recordings of the proceedings were made by both the tenth grade of the Ernst-Reuter-Schule and 4 Coy 12 Bn EME. They both planned to run the film footage and think over what had happened.

Detlef Puhl

(Frankfurter Rundschau, 4 March 1981)

## Illiteracy is more widespread than you might imagine

Wolfgang Sperr of the Volkshochschule, or night school, in Heme, Westphalia, says there are more people unable to read or write than most of us would ever imagine.

He should know. He runs adult literacy courses at the Volkshochschule. Illiteracy may sound unlikely in Germany but it is a fact nonetheless.

Even with compulsory schooling there are still many adults who count the number of suburban railway stations on the way to work because they cannot read the names of the stations.

Herr Sperr first came across the problem when a man in his mid-20s called in at the office to enquire after evening classes. He wanted, he said, to learn to read and write.

That is, he wanted to read and felt he might possibly manage to learn to write too. He wanted to marry and felt he could not, in the long run, support a family as an illiterate.

Herr Sperr was taken out of his stride, never having encountered the phenomenon before, but made sure the caller's initiative was rewarded. He was given private tuition.

Only his boss and his fiancée were aware of his problem. But he was an exceptional case. Most illiterates are sent to evening classes rather than coming of their own accord.

They are usually sent by social workers and are generally problem cases in other respects too: alcoholics, drug addicts or young people from broken homes.

"There is going to be trouble keeping students in attendance," Herr Sperr realises. But even if there are dropouts a start has to be made at dealing with the problem.

The North Rhine-Westphalian Education Ministry has no figures on adult illiteracy but a retired inspector of schools says:

"We used to have 15 to 20 problem cases on average per region comprising roughly 400,000 pupils."

They were children who just did not turn up for school. The education authorities warned parents, but to no avail.

"When checks were arranged the children were brought to school by taxi, but at the first opportunity, during the morning break, they promptly played truant as usual."

The authorities are not powerless, of course. If parents continually refuse to see to it that their children attend school, either because they cannot be bothered or the children go out to work or even beg, they can be taken to court.

"But what is the court to do?" the ex-inspector asks. Fines are usually a vain hope because the families are broke anyway. Prison sentences are no solution either.

Either the mother or the father is imprisoned. They are mostly large families. What are they to do without a mother? What, for that matter, without a breadwinner?

So, judges usually order special care and attention by social workers. But this too is by no means tied to prove effective.

"Children have been known to reach school-leaving age and have spent as little time at school as other children have been on holidays."

There is no way whatever of dealing with the problem where families that keep on the move are concerned, since schools are run by the individual Länder.

By the time the education authorities in North Rhine-Westphalia have discovered that a particular boy or girl has not been to school for some time the family could well have moved to the Rheinland-Palatinate or Baden-Württemberg.

Gunther Baffing  
and assistants report (Die Welt, 2 March 1981)

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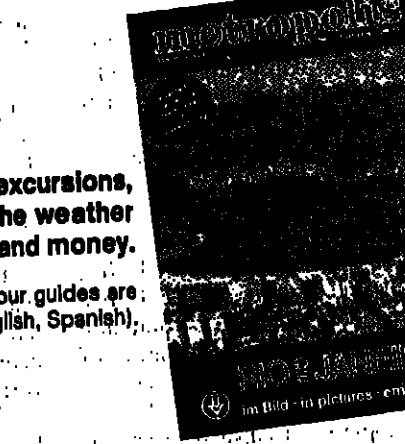
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## RESEARCH

## Live-wire Göttingen laboratory cats show link between mind and muscle

Cats with built-in transmitters are part of a bid by scientists at the Max Planck Experimental Medicine Institute, Göttingen, to find out how muscles work.

What are the control mechanisms for muscle movements when walking or running? How do brain, spinal column and muscles coordinate their activities?

The Göttingen research scientists have hit on a novel method in their bid to unravel the mystery.

The radio cats are free in their movements but wire back the nerve signals transmitted to the leg muscles and the information relayed back the central nervous system.

Apart from insights into the neurological control mechanisms for muscle movements, the scientists also hope to gain important information for the diagnosis and treatment of disorders of the motoric section of the central nervous system.

Running requires a carefully planned interplay of various muscles and muscle groups which, in the form of flexors and extensors, control bending and stretching of the limbs.

While one of these groups bends the leg the other stretches it, but all this must occur in an orderly and coordinated sequence.

This muscle choreography is devised and controlled by the central nervous system. It involves not only the brain but also the spinal cord, which transmits working instructions in the form of nerve impulses to the individual muscles.

At the same time, sensors in the muscles report back on the function of the movement.

In this way the motoric programme can be controlled and, if necessary, corrected as for instance when the legs meet with a sudden obstacle. As soon as this happens, a complex stumbling reaction is triggered.

One of the objectives of the project is to decode this flow of signals from the spinal column to the muscles and vice-versa.

Professor Karl-Heinz Sontag, who heads the project, and his assistant, Dr Peter Wand, are closely cooperating with Dr Arthur Prochazka of the Sherrington School of Physiology, St Thomas' Hospital, London.

They must of necessity work with animals because there is no other way of gaining insights into the complex electrophysiological processes involved in every muscle movement.

The electronic method used in Göttingen has been developed by Dr Prochazka.

Says Professor Sontag: "Nerve signals can be monitored by implanting tiny electrodes into relevant nerves through which the weak electrical impulses and their fluctuations can be registered."

Conventional technology as used before this breakthrough permitted the monitoring of such processes only in anaesthetised animals or in animals whose central nervous system had been damaged, but not with active animals that were free to move in a perfectly normal way and whose motion was absolutely unhampered.

The cats used in the Göttingen project have the electrodes implanted under anaesthetic in the nerve channels link-



ing the spinal column with the hind leg muscles.

Extremely thin cables under the skin lead from these electrodes to a tiny transmitter secured to the animal's head.

The method permits the constant monitoring of nerve impulses transmitted to the muscles and of those going from the muscle back to the central nervous system.

In addition to the electrodes, a very thin, rubber tube filled with mercury (which is an electrical conductor) runs parallel to one of the hind leg muscles.

When the cat is in motion, the tube changes its position in step with the expansion and contraction of the muscle.

These movements are transmitted to the mercury inside the tube which keeps changing its electrical resistance in unison with the muscle movement.

The researchers in Göttingen make use of this fact to monitor not only the nerve signals but also the changing length (as a result of stretching) of one or several muscles, thus obtaining a clear pattern that they can compare with the nerve signals.

This technique enables them to gain clearer insights into the sequence in which various muscles are activated through instructions from the nervous system.

What, for instance, is the sequence of motion for muscles that have differing functions? And what are the signal patterns in normal, unhampered movement as opposed to more complex

movement processes, for instance when stumbling or making contact with the ground after a fall?

The Göttingen project thus provides information on basic motoric mechanisms. It also provides the basis for further research into clinical and pharmacological issues.

This could open up new diagnostic and therapeutic methods in human medicine as for instance with patients suffering from motoric disorders of the central nervous system.

But Professor Sontag stresses that the intention is not to equate disorders in animals with those in humans. Even so, this type of research should be planned in a way that will serve clinical needs and thus be practically orientated.

One example is the testing of pharmaceuticals on animals. Since animals usually do not suffer from human diseases the tests must be made with healthy animals.

This means that the entire healthy organism is exposed to the test substance which, in the case of a human patient, should ideally restrict its effectiveness to a specific disease.

This does not apply when experimenting with cats in which a motoric disorder resembling a specific clinical syndrome has been artificially created.

In such a case the test substance can be applied directly to the centre of the disorder. This means that the effectiveness of a pharmaceutical can be tested the very spot where it is supposed to work and the picture obtained is undistorted by side-effects.

Dr Prochazka and the Göttingen team have perfected their method to an extent unrivalled by any other research group.

## How to live longer

The Bonn research team went about their study systematically. In 1965, they gathered a group of 60- to 75-year-olds. After a medical checkup the researchers collected background information on the group's ancestors, conditions in the parental home, upbringing, social status, occupation, intelligence, personality, diet and social contacts.

The checkups were repeated five times in the ensuing years to establish changes in the physical condition and general attitudes to life as a means of gaining insights into the process of aging.

Eighty people survived to take part in the final checkup, subsidised by a Volkswagen Foundation grant of DM440,000. These 80 are now aged between 75 and 90.

They have thus by far exceeded the statistical life expectancy which is 69.8 years for men and 73.9 for women. But why did these 80 survive?

Says Professor Lehr: "We know now that longevity depends on a wide range of factors, some of which have an influence on each other."

In some cases longevity is hereditary, but this does not always apply. First-born children and those of young mo-

Moreover, the surgery needed to implant the tiny electrodes causes the least possible discomfort, which is of importance with cats due to their personality.

Notwithstanding the implanted electrodes and the transmitter attached to the head, they move around the laboratory in a perfectly normal fashion and permit themselves to be picked and fondled. This shows that the experiments impose no stress on animals.

Undeniably, medical doctors and neurologists in particular have been following the Göttingen project with interest.

Micro-electrodes in conjunction with telemetry could greatly improve analysis prior to severing specific nerves through surgery. Improved technology of this nature could also be of help with ailments marked by spasms, such as epilepsy. The origin of these spasms could be tracked and pinpointed and perhaps even treated.

Another possible application of new technology could lie in improving neuro-stimulation in cases of pain that does not respond to medication.

This would involve the implantation of electrodes that would enable the patient to "switch off" the nerve channels transmitting the pain.

"The list is endless," says Professor Sontag. "But great restraint is necessary in making use of these possibilities even if we disregard the horror vision of a man with a control panel."

The possibilities that have been provided must be assessed sensibly. One of the reasons why the Max Planck researchers involved in the experiment orientate themselves to clinical requirements.

But the main question they want to solve is, as Professor Sontag put it: "How much brain do you need to be able to run?"

(Der Tagesspiegel, 7 March 1981)

thers have a higher life expectancy than others.

But the parental home, upbringing, education and intelligence also play an important role, as does the attitude towards life.

"People who remain physically and mentally active, who have wide-ranging interests and who plan for the future even in old age; those who enjoy social contacts and who have a good life are likely to live longer," says Professor Lehr.

It is worth keeping physically and mentally fit. This helps prevent old age debility and forgetfulness.

The best medicine, the Bonn researchers say, is a positive outlook on life. Those in the group who complained about loneliness and boredom were the first to die.

The survivors consider old age the best time of their lives, and they talk of the good old days. They all are satisfied with their lot and that they are much better off than they were in their youth.

They do not complain about congestion due to the many cars that crowd the streets, they do not complain about conveniences as central heating, machines and telephones. They could not afford earlier.

Says Professor Lehr: "We have 85-year-olds whom we find it difficult to come for a checkup on three

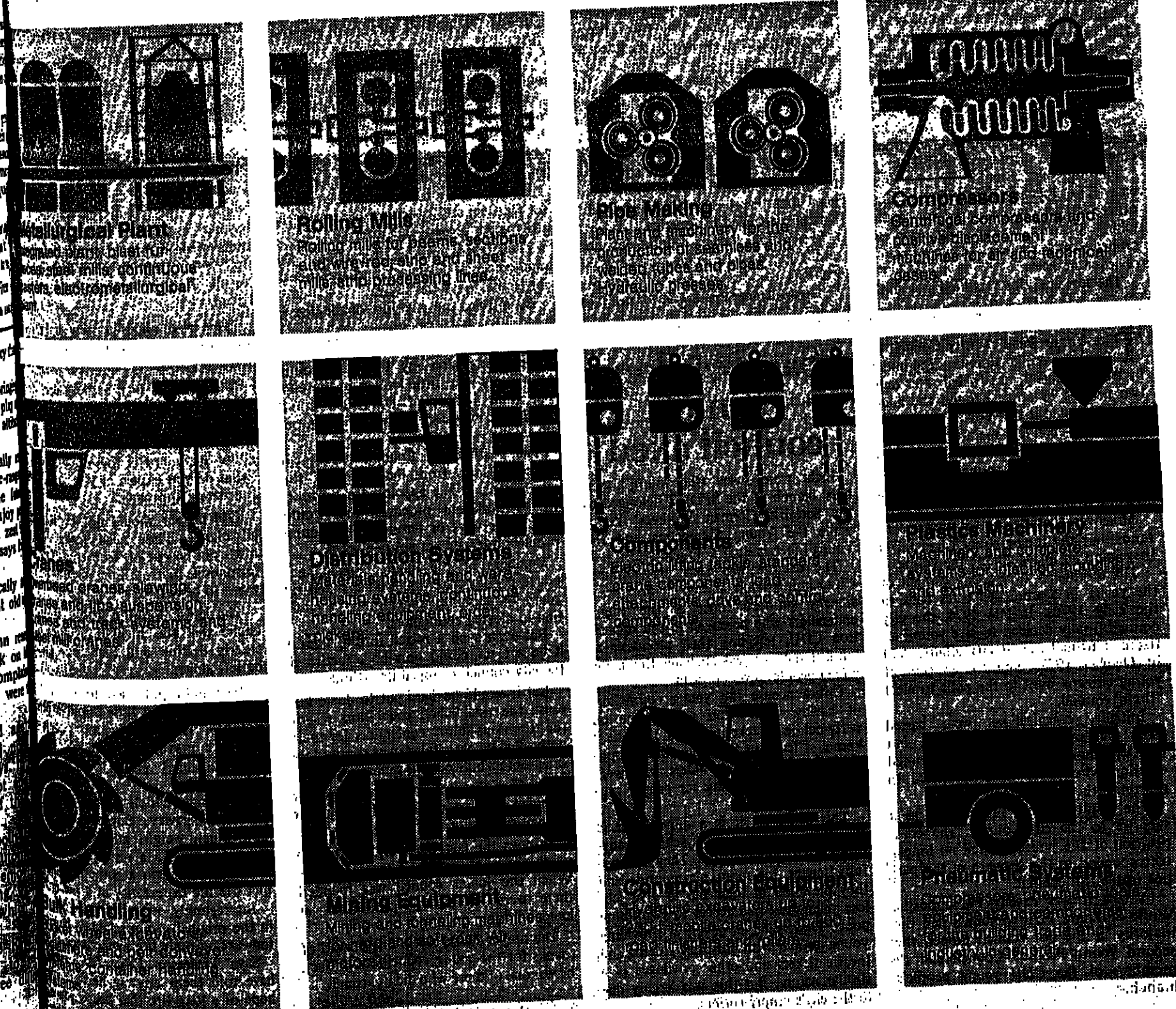
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## MODERN LIVING

## What makes a couple happy?

Marital disputes now rarely revolve around money, and the formerly so-dreaded payday uproar is well on its way out.

In German middle class families, the housekeeping money is no longer a source of marital trouble and even the occasional bit of infidelity plays a secondary role in such disputes.

Researchers at the Max Planck Institute of Psychiatry, Munich, say that in three out of four cases marital conflicts now revolve around sex and love, which have become the acid tests of a marriage.

In a therapy experiment subsidised by the Scientific Research Association psychologist Kurt Hahlweg and his three team-mates tried to find out whether marriage counselling could make use of a problem list.

The list used by the Munich team encompasses 17 possible areas of conflict, ranging from sex via personal habits to problems with relatives or children and ideological differences.

The team interviewed 90 people who had applied for counselling. They assessed the most frequent sources of conflict that can no longer be resolved by those concerned and conflicts that impose a heavy strain on the marriage but are never talked about.

To lend scientific substance to their questionnaire, the Munich researchers needed a control group, in other words, couples whose marriages were intact.

Finding such couples was far from easy. The psychologists visited various offices and factories, spoke to couples taking dancing courses and even recruited couples among their own circle of acquaintances.

The last study of this kind was made

more than 20 years ago in America. At that time, both happy and problem couples most frequently listed money, the manner of keeping house and child rearing as the sources of conflict.

This was followed by personal elements (such as sexual prowess). Religious issues ranked at the very bottom of the list.

The list now looks quite different. Both groups list above all problems of an emotional nature while finances and housekeeping play a secondary role.

Among the more remarkable facts that transpired is that though the group of problem marriages has more conflicts (in numerical terms) than the happy couples the sequence of these conflicts is surprisingly similar.

In other words, the problems of happy couples are the same as those of the unhappy ones.

The study concludes that for about three-quarters of the people attending counselling sex and love are the central problems.

More than 50 per cent of the trouble has to do with the personality of the partner, recreation, personal habits, confidence and personal freedoms granted to the other partner.

One in six of happy couples also have sex problems that lead to conflicts and one in ten considers *Weltanschauung*, personal habits, love and decisions on recreation as a source of dispute.

There is no answer to the question why money no longer plays the dominant role. The fact that most people now earn more is hardly an adequate answer.

The Munich researchers see it this way. The discrepancy between the findings in America and here might be due to the difference in the cultural background.

Moreover, the American study was made in 1960, and there is every likelihood that the causes of marital trouble have also changed in America.

In addition, today's couples are more readily prepared to admit emotional differences.

Ladislav Kuthy  
(Frankfurter Rundschau, 7 March 1981)

## Being single is not so swinging, survey finds



The legend of the swinging singles is evidently exactly that, just a legend. These are the findings of a recent study carried out by the Recreation Research Institute in Munich.

The 20- to 35-year-old financially independent and sexually liberated male driving a sports car and oozing masculinity and self-confidence is a cliché.

Three-quarters of West Germany's 14 million adult singles are anything but happy with their lot. For them, the TV set has assumed the role of an *ersatz* partner.

The singles are an extremely diverse group of our society. They include the unmarried, the divorced, the separated and the widowed of all ages. They can be with or without children and with or without an occupation.

Fifty-four per cent are women, 17 per cent belong to the group of 20- to 29-year-olds; 19 per cent are aged between 30 and 39, and 40 per cent are over fifty.

The idea of "the lonely old" and "the outgoing young" is also a cliché. Young people find it more difficult to establish person to person contact and feel more lonely than the older generation.

Many singles are faced with what the study calls the dilemma of loneliness. They are unable to reconcile their desire for freedom and casual contacts with the striving for security and a haven.

"There are worlds separating the vaunted singles ideology and realities of single life," says the study.

As a rule, the sex life of singles is

also a rather sad business. Sex relations among them are usually more and purely physical. Moreover, the frequency of such contacts is more than generally assumed.

Unlike couples, singles are more affected by the contrast between work and leisure time. Most spend their time after work watching the TV, radio and telephone.

Their leisure time attitudes are by consumption. They want new all the time and are idealists for the relevant industries.

According to the head of the study, Horst W. Opaschowski, living alone for many a filtering process for many a person relations and the self-realisation while for others it acquired a non-voluntary and stable permanence.

Many singles try to combat their frustration with liquor. Says one: "I was frustrated because a weekend in Hamburg was more often than not turned sour, so I took a bit of brandy to bed with me and became a few seasons ago."

(Mannheimer Morgen, 24 February 1981)

## How to live longer

Continued from page 12

occasions; but each time he was lying somewhere."

The medical checkups showed some of the group felt physically poorer condition than was warranted. There were also those who felt better than they should be, result, they remained "active and lived."

This also sheds a new light on the question of how much a doctor can tell old people.

There is, in fact, a great deal of difference between the doctor and nursing staff can learn from the Bonn study. Says Professor Lehn, Bonn study. Says Professor Lehn, Bonn study. Says Professor Lehn, Bonn study.

Old people should not be relieved of all chores. They need tasks and must not be cut off from the flow of information. Instead, they should be motivated to be active.

The most harmful thing is the cliché that the mental faculties of elderly decline and that they should be left alone.

"We must get used to the fact that old people are not a homogeneous group. There are young people and old people, and they should be treated accordingly."

"We know which factors have an influence on longevity. But we don't know how much weight attaches to each of these factors. As a result, we cannot predict the life expectancy of a person."

Interestingly, none of the 220 in the original group asked to be forecast on their life expectancy. Says Professor Lehn: "We have told them anyway because we hope of a long life that keeps you

(Saarbrücker Zeitung, 5 March 1981)

## Saarbrücken junior council axed

Eight were Jusos (the young members' branch of the SPD), 2 belonged to the Socialist German Workers' Youth while the Young Democrats and the Young Liberals each held one seat.

The decline was thus programmed. City administrators and councillors occasionally snubbed those of the young councillors who belonged to the opposition CDU, rejecting their proposals as "immature" or just shelving them, the young people now complain.

Critics accuse the young councillors of having wasted too much time on party-political bickering. And there is a kernel of truth in this. The young councillors emulated their elders who were anything but exemplary for proper municipal work.

This being so, it is a minor miracle that the young councillors achieved anything at all. But they did. They successfully fought for more playgrounds and they prevailed in their bid to give jobless youngsters free access to swimming pools. They failed, however, in providing young people with cut-price cinema and theatre tickets and other privileges of a similar nature. But this was largely due to the city's empty coffers.

The mayor found not a single word of thanks for the young councillors. In fact, he was one of those who didn't attend.

Adolf Müller  
(Kölnischer Stadt-Anzeiger, 6 March 1981)

## SPORT

## Franz Beckenbauer comes in for criticism

Beckenbauer, who is on cordial but far from intimate terms with his team-mates, has yet to come to terms with Hamburg's style of play.

"We always play the same game," he says. "Kaltz does his cross-kicks, Hrubsch tries his headers. They're always moves an opponent soon has sorted out."

Club manager Günter Netzer, a personal friend since the days when they played alongside each other in the national squad, does not feel that this criticism warrants changing everything.

"We have been successful for three seasons with this system, so we're going to stick to it," he ruled.

Manfred Kaltz agrees, albeit from a different angle. "It will probably be another three months or so before Franz is fully integrated here," he says.

The indications are that Beckenbauer and his team-mates do not always see eye to eye. "We have to carry six members of the team as dead weights," he claims.

Team captain Felix Magath and Kaltz used to go on record as saying the 35-year-old veteran sweeper ought to be reconsidered for international duties. They no longer seem to do so.

Beckenbauer sees no reason why he should hide his head in the sand on this account. He testifies to self-confidence by saying he feels he is in good form, but even he prefers to keep his own counsel when international duties are mentioned.

"It is a little early to start talking about that," he insists.

National team manager Jupp Derwall evidently agrees, realising that Beckenbauer in his current form would hardly stabilise the team.

Derwall denies claims that he and

who watched Hamburg beat Eintracht 2-1 from the stands, Beckenbauer, who was transferred to Hamburg, early this season, is still a perfect leader of the team and an outstanding sweeper, the team manager reckons.

Beckenbauer did not say was that

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## Table tennis commuter from Tokyo

velling costs. "My husband's travel agency arranges all that," she says, "and all they ever say is that it is good value for money."

Tamasu manufacture everything a table tennis player could possibly need: tables, bats, balls, clothing and shoes.

To make sure the German association still enters her for international competitions she now trains even harder than she did when playing for her last German club in Duisburg, near Cologne.

"In the morning I ride three quarters of an hour on my bike to the university and put in two hours' training. In the afternoon I go to my husband's company and often play against company teams from Japanese banks. There are no clubs in the way that they exist in Germany."

So there is no club life either. "No," she says, "there is nothing in the way of a beer after training, not in Japan."

There is no way of getting to know people more intimately through sport either. Apartments are usually too small to invite people round.

"We have an enormous 40-sq-metre apartment in Sugnamiko," she says, "but other players can never invite us back to their places."

Were it not for table tennis she would be in a difficult position, she admits. She spent three months learning Japanese but it is difficult to find a job as a foreigner.

But she is not interested in a job. For the time being playing table tennis is more fun. "As long as my husband and I are not unable to make ends meet I aim to get by without working."

"Besides, I couldn't possibly hold down a job. I spend all day training, with short breaks. And I put in a lot of travel to compete in tournaments."

"If I were to work for a Japanese company I would only get one week's holiday a year and would have to give up table tennis."

So she prefers to train and to cook her husband's meals. "I go in for strictly Japanese cooking, although I'm not yet perfect at it." And she travels.

It is a life that is tougher than it used to be in Germany, but she says she is happy. What does happiness mean?

"It's in the family coat of arms," she says, having got to know her husband four years ago in Moers, near Duisburg. "As happy and carefree as a bird."

In Japanese Kamizuru means Happy Crane, the feathered variety, of course.

Klaus Blumie  
(Die Welt, 10 March 1981)

Beckenbauer have agreed the former Munich ace is to make his international comeback in Hamburg on 29 April when Germany play Austria in a World Cup qualifying game.

"At present I am not even considering the idea," he says. "There has never been any mention of the subject. As far as I am concerned performance alone counts."

Paul Breitner, another former Munich and international star, seemed an unlikely prospect for a comeback against Albania on 1 April too.

Derwall was hesitating, not needing to nominate his squad until 20 March. "I must have a word with him (Breitner) first," he said.

"I'm sure I don't know when I shall get round to doing so. Besides, I'm not going to allow myself to be ridden over roughshod."

Horst Müller-Manz  
(Kölnischer Stadt-Anzeiger, 11 March 1981)

## Sylvia Hanika comes of age in the tennis court

Munich tennis star Sylvia Hanika, 21, was well on the way to becoming the spectators' pet hate. She swore like a trooper, refused to shake hands with her opponents and trampled on a bouquet of flowers because she was mad at losing.

"She's just a Bavarian girl with a mind of her own," said West German chief coach Richard Schönborn.

But what a change came over her when she won her first grand prix tournament in Seattle. "I am very, very happy," she said after beating Barbara Potter of the United States 6-2, 6-4 to win roughly DM50,000 in prize money.

In years gone by she could seldom claim to have been happy. She seldom beat her toughest opponent: herself. Says Schönborn, who coached her for three years:

"She had her worst problems with herself. She was a loner and had little contact with the outside world. She always needed someone to relate to and to entertain her."

But those days are over. Sylvia Hanika has grown independent and gained self-confidence.

These days she travels alone, making her own arrangements, booking flights, hotels and entering for tournaments.

Herr Schönborn is convinced she has gained in playing strength and self-assurance in the court since starting to run her own life.

"She is no longer dependent on her coach when things don't work out. Now she can get back on her own feet. Only the world's best can do that by themselves."

Gone are the days when she would fly to the United States for a week, only to return disappointed after a tournament or two. Now she stays three or four weeks, returning to Munich for a mere week or so to get in a little training.

"Nowadays I stay on the move to keep up with the world's best," she says.

That is how she started to succeed, says Herr Schönborn. By playing continually against the world's best Miss Hanika lost her respect for the big names.

She now knew she could beat any opponent. A fortnight beforehand she had lost to Martina Navratilova in Cincinnati, but in the final.

Now she stood a fair chance of joining the best eight women players in the world and qualifying for the masters tournament in New York at the end of March.

Success takes its toll, of course. She sees little of her parents and friends. She feels a little homesick. She is always under stress.

"All top-ranking German women tennis players have faced the same problem. They didn't want to put themselves out," she says. "But that's the only way to make good."

"I am really satisfied with my career at present," she says, and she knows what she wants, too, "to be one of the top five." Her opponents no longer doubt for a moment she will succeed.

"Give her a year or two like she is and she will be right there at the top," says no less qualified an expert than Billie Jean King after a tournament in Las Vegas.

Miss King, who holds a record number of women's Wimbledon crowns, should know. She had just lost to the

Ulrich Dost  
(Die Welt, 3 March 1981)



Sylvia Hanika  
(Photo dpa)

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